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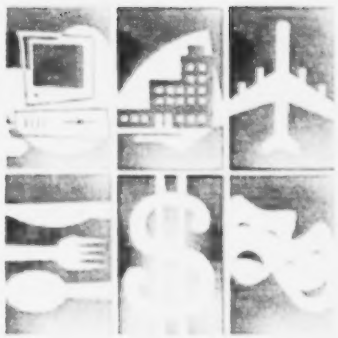
Trends in the telephone call centre industry



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Note of appreciation

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Highlights

- With the continued growth and outsourcing of business services in the Canadian economy, telephone call centres experienced a 27.7% annual average increase in revenue from 1998 to 2006.
- Telephone call centre establishments are disproportionately found in certain provinces, located in smaller urban areas with higher unemployment and a relatively educated labour force.
- The dramatic rise of the Canadian dollar and increased global competition have eroded the comparative advantage of low labour cost locations for telephone call centres in Canada.
- As the adoption of newer technologies and the proximity to research centres become more important factors for location, telephone call centres are less attractive as regional economic development tools.

Introduction

With the growth of the service economy, business support services have become more important to the Canadian economy. Changes in business practices such as outsourcing have been made possible by advances in telecommunications technology. Consequently, the business support services' industry, which includes credit agencies, telephone call centres, and document preparation and business service centres, has experienced steady growth. Telephone call centres in particular have been identified as potential catalysts for regional development. Research in this area has tended to deal with employment issues (e.g. job creation) or with case studies of firms or communities. Using an industry life cycle approach, this study examines the changing location of telephone call centres.

The growth of service industries and outsourcing

Service industries now account for three-quarters of employment (74%) and about 70% of Gross Domestic Product (GDP). The growing prominence has been attributed to factors ranging from the income elasticity of demand for many services to the increasing labour force participation of women.[1] For business support services, the trend of outsourcing to satisfy the intermediate demand for services by goods-producing industries was important. Outsourcing and other changes in business practices were often made possible by advances in information and communications technology (ICT).

Although outsourcing began in manufacturing, it has spread to information technology and business support industries, among others. It is now also associated with globalization (i.e., capital mobility) and a movement to countries with low wages such as India and China. Within North America, many American companies have outsourced to companies in Canada due to higher labour turnover in the United States, a pool of relatively skilled unemployed people in Canada, and, until recent years, a favourable exchange rate.[2]

One impact of this outsourcing has been the type of jobs created (i.e. the "good versus bad jobs" debate).[3] Another potential impact from outsourcing of services is on regional development. Some service activities are more 'footloose', unconstrained by traditional location factors such as physical proximity to resources or markets.[4] Certain business services have the potential to act as a catalyst for economic growth in more peripheral locations. As such, many jurisdictions are competing to attract telephone call centres by offering financial incentives, training packages, and updated technology.

Definitions and data sources

Telephone call centres are described in the North American Industry Classification System (NAICS, 56142) as establishments that receive and/or make telephone calls for others including, soliciting or providing information, promoting products or services, taking orders, and raising funds; this includes companies answering telephone calls and relaying messages to clients, as well as those providing voice mailbox services.

It is useful to distinguish between 1) Customer care -- taking inbound calls and, 2) Telemarketing -- making outbound calls. The former includes technical support, fielding information queries regarding software problems for example, taking reservations and the dispatch of technicians. As not all call centre activity is contracted out, statistical data on these activities is often limited.

The contracting out of a service activity (e.g. payroll) by one firm to a legally separate firm is considered outsourcing. If the service-providing firm is located in another country (e.g. India), this practice is considered off-shoring. If the service-providing firm is located in a separate but contiguous country (i.e. Canada vis-à-vis the United States), this practice is referred to as near-shoring.

The *Goods and Services Tax* (GST) data remitted to the Canada Revenue Agency (CRA) is used to provide revenue trends for telephone call centres in current dollars. The GST revenue data are reported by the company (at the legal level) rather than the establishment (the statistical level). This GST data has been processed, calendarized and allocated to the establishment level for complex enterprises (ie: those having establishments operating in more than one industry or province). ***These data were used for research purposes only***.

Canadian Business Patterns provide counts of active establishments in Canada by geography (2001 SGC), industry (2002 NAICS) and employment size. Counts are compiled from the Business Register (BR), the central repository of information on businesses in Canada that serves as the principal frame for the business statistics program at Statistics Canada. The BR contains all Canadian businesses with payroll remittances to the CRA; or that have a minimum of $30,000 in annual sales revenue; or that are incorporated federally or provincially and have filed a federal tax form recently.

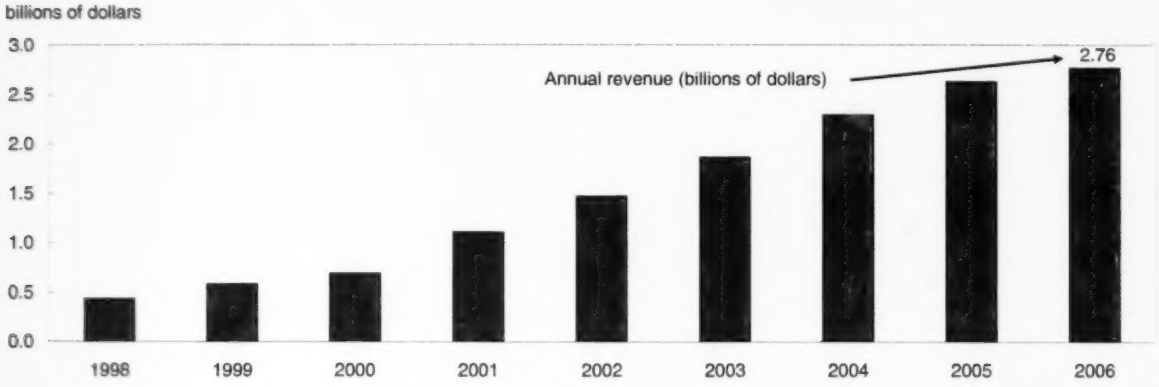
Trends

Employment growth in the service sector has consistently outstripped that of the goods sector. From 1991 to 2005, employment in service producing industries increased by 25% (versus 13% for goods producing industries). In business support services, employment jumped by 190% over the same period. By 2006, the business support services industry reported over $5.7 billion in revenues with telephone call centres accounting for 48% of these revenues.

Even among the fast growing business support services industry, telephone call centres experienced growth that merits closer examination. The industry's revenues climbed steadily from $424 million in 1998 to $2.76 billion in 2006 – representing an average annual increase of 27.7% (Figure 1). Over two-thirds of this revenue growth was generated by call centres located in Ontario.

There are two clear trends in the telephone call centre industry. First, employment and revenue growth has significantly exceeded that of other service industries and, second, much of this growth is concentrated geographically.

Figure 1 Annual reported revenue, telephone call centres, 1998 to 2006



Source: Statistics Canada, based on experimental use of administrative data.

Patterns

Unlike manufacturing locations, which have either a supply-side or a demand-side orientation depending on factor costs (e.g. transportation) and market considerations, services tend to be provided where they are consumed. Business services, all else being equal, tend to locate in larger commercial centres. With technological changes however, the necessity for service activities to have a market-oriented location has declined. For instance, advances in ICTs permit many services to be provided over longer distances, even internationally. With telephone call centres, there is an increasing prevalence of both outsourcing and off-shoring (see Definitions).

In Canada, telephone call centres are most prevalent in some Eastern provinces and in Ontario (Table 1). While, on average, there are 6.8 call centres per 10,000 business establishments nationwide, the numbers for Prince Edward Island (15.8), New Brunswick (13.1) and Ontario (8.4) are considerably higher. In contrast, in the Western provinces, where labour markets are tighter, there is a lower than average number of telephone call centres.

Table 1 Number of call centres per 10,000 business establishments, 2005

	number
Newfoundland and Labrador	7.1
Prince Edward Island	15.8
Nova Scotia	5.6
New Brunswick	13.1
Québec	7.0
Ontario	8.4
Manitoba	6.0
Saskatchewan	4.4
Alberta	4.2
British Columbia	5.3
Canada	**6.8**

Source: Statistics Canada Business Register

Establishments with employees were divided into three employment size categories: Small < 10 employees (42% of establishments), medium from 10 to 49 (33%), and large > 50 (25%). Since 2000, there were almost 100 more active telephone establishments (Table 2). While there were fewer small centres employing less than ten persons in 2005, the number of larger call centres increased. This consolidation into larger service providers is a hallmark of the industry life cycle model with respect to many services. Typically during the earlier stages of a service activity, the market is characterized by a relatively large number of smaller providers.

Table 2 Change in the Number of Telephone Call Centre Establishments, 2000 to 2005

	Establishment by employment size			
Region	Small	Medium	Large	Total
Eastern	-6	4	19	17
Quebec	-21	22	12	13
Ontario	-21	42	44	65
Western	-25	4	22	1
Total	**-73**	**72**	**97**	**96**

Source: Statistics Canada Business Register

For instance, a trend toward larger firms has also occurred with Internet service providers (ISP). Initially, the ISP industry consisted of a large number of smaller establishments providing dial-up service. As the industry matured, fewer but larger establishments captured more of the broadband market. With telephone call centres, a large number of smaller providers initially created a competitive market and, as a result, production shifted to locations with the lowest labour costs.

The important location factors for telephone call centres include some combination of labour supply and skills, cost, market proximity and telecommunications infrastructure along with government incentives.[5] This study focuses on labour supply and skills by classifying call centre location by urban size, unemployment rate and by residents with post-secondary education. We hypothesize that telephone call centres are located, all else being equal, in areas of under-employment; characterized by higher unemployment but with a relatively educated population.

To examine the relative concentration, a density measure of the number of telephone call centre establishments per 100,000 persons was calculated. Nationally, there are about 2.5 telephone call centres for every 100,000 Canadians (Table 3).

Table 3 Telephone call centres per 100,000 urban residents by unemployment and education, 2005

	Proportion of population with post-secondary education by quartile				
Unemployment rate by quartile	Bottom (less than 23.3%)	Second (23.3% to 26.0%)	Third (26.1% to 30.0%)	Top (over 30.0%)	Total
Bottom (less than 6.6%)	1.5	1.4	3.0	2.5	2.3
Second (6.6% to 8.0%)	2.0	1.6	4.0	2.4	2.3
Third (8.1% to 10.3%)	1.7	2.2	3.0	5.8	3.1
Top (more than 10.3%)	1.8	2.1	2.5	4.7	2.2
Total	**1.8**	**1.9**	**3.1**	**3.2**	**2.5**

Sources: Statistics Canada, Business Register, Census

The results support our hypothesis in that the highest densities of call centres (5.8 and 4.7 per 100,000 persons) are found in those urban areas with high unemployment (i.e. two top quartiles) and with populations having the highest post-secondary education. And the highest density (6.1 establishments per 100,000 persons) was found in smaller urban areas with a population between 33,500 and 58,350 (data not shown).

To summarize, telephone call centre establishments are disproportionately found in certain provinces, located in smaller urban areas with higher unemployment and a relatively educated labour force.

Issues

During the 1990s and into the early 2000s, more telephone call centres located in smaller cities, often those with declining industries but also where residents have higher levels of post-secondary education. The telephone call centre industry, including 'outbound' telemarketing, provided needed employment in depressed regions and valuable service 'exports'. In this early phase of the industry life cycle, lowest labour cost locations are attractive. With a state-of-the art telecommunications infrastructure, a well-educated bilingual workforce and an aggressive program of incentives, New Brunswick was considered an attractive location.[6]

Canadian call centres have lost the advantage of a lower dollar and face more off-shore competition from China, India and elsewhere. As such, the Canadian telephone call centre industry should move beyond the lowest labour cost phase of the industry life cycle. It is becoming important for telephone call centres to offer higher value-added in terms of skills, both technical and linguistic, and technology.[7] However, these value-added services will further alter the locational calculus, particularly for 'inbound service' centres, as proximity to post-secondary institutions and a skilled labour pool to support advanced ICT infrastructure becomes more important.

There is also evidence of some consolidation into larger establishments. Although industry standardization favours lower labour cost locations, the Canadian comparative advantage has shifted away from low labour cost locations found in areas with more unemployment. In the value-added phases of the telephone call centre life cycle, proximity to universities and adoption of newer technologies are key factors; labour skill requirements will also change. If the new comparative advantage is proximity to 'research clusters' or agglomeration economies, this will dramatically reduce the potential for a telephone call centre to act as a regional development catalyst in more peripheral areas.

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Footnotes:

1. See Fiori, McKeown & Taktek, (2005).
2. See Schick (2004).
3. For example, see Akyeampong (2005) and Heisz & LaRochelle-Côté (2006).
4. See Wernerheim & Sharpe (2002).
5. See Larner (2002) and McGregor (2002).
6. See Power (2000).
7. See Hill (2006).